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Addendum

Mahopac Central School District
Mahopac, New York

SED NO. 48-01-01-06-0-004-020
48-01-01-06-0-006-013
48-01-01-06-0-003-008
48-01-01-06-5-010-009
48-01-01-06-7-026-001

Reconstruction at
Mahopac High School
Mahopac Middle School
Mahopac Falls School
Bus Garage
New Pump House

Tt Project No. 121111-19002

BID Addendum No. 6
to
Drawings and Project Manual

March 5, 2021

To: BIDDERS

This ADDENDUM forms a part of the BIDDING AND CONTRACT DOCUMENTS and modifies the following documents:
Original DRAWINGS dated August 21, 2020.
PROJECT MANUAL dated August 21, 2020, BID ADDENDUM NO. 1, dated February 12, 2021, BID ADDENDUM NO. 2, dated February 16, 2021, BID ADDENDUM NO. 3, dated February 22, 2021, BID ADDENDUM NO. 4, dated March 1, 2021 and BID ADDENDUM NO. 5, dated March 2, 2021

Acknowledge receipt of the ADDENDUM in the space provided on the FORM OF PROPOSAL

This ADDENDUM consists of (7) pages and the following:

ATTACHMENTS

PRE-BID REQUEST FOR INFORMATION QUESTIONS/ANSWERS

REISSUED PROJECT MANUAL SECTIONS

SECTION 00 41 03 - BID FORM – MECHANICAL WORK
SECTION 26 27 26 - WIRING DEVICES

REISSUED DRAWINGS (30 x 42)

AE600 Schedules

PROJECT MANUAL MODIFICATIONS

ITEM 6-C-1: Refer to SECTION 01 12 00 - SUMMARY OF PROJECT

1. Paragraph 1.8, A., 5., b., AMEND to read as follows:
 - “b. Provide water lines, gas lines, vacuum lines, and acid waste lines as shown. Plumbing contractor to provide all plumbing fixtures for sinks and gas cocks as specified.”
2. Paragraph 1.8, A., 5., ADD the following:
 - “n. Provide Facility Ground-Mounted, Potable Water Storage Tank and associated foundation. This foundation is a delegated design. Reference Div. 3 Concrete for applicable information. Reference civil drawings for applicable information.
 - o. Provide above ground piping as shown from Facility Ground-Mounted, Potable Water Storage Tank to pumps within the pump house. Reference civil drawings for applicable information.”
3. Paragraph 1.13, B., 8., AMEND to read as follows:
 - “8. Division 32 – Exterior Improvements – all Sections. *The new synthetic turf including installation will be purchased off of state contract by the Owner. Strict coordination will be required.*”

ITEM 6-C-2: Refer to SECTION 01 21 00 - ALLOWANCES

1. Paragraph 3.8, ADD the following:
 - “B. Allowance No. SC-2 Contingency Allowance: Include the sum of \$50,000 for use in rock removal.”

ITEM 6-C-3: Refer to SECTION 01 23 00 - ALTERNATES

1. Paragraph 3.1, ADD the following:
 - “D. Alternate No. 4: Temperature Controls
 1. This Alternate affects one Contract, as follows:
 - a. **Mechanical Contract:** Provide temperature controls as specified in Section 23 09 00 – INSTRUMENTATION AND CONTROL FOR HVAC.”

ITEM 6-C-4: Refer to SECTION 01 50 00 – TEMPORARY FACILITIES & CONTROLS

1. Paragraph 2.2, G., AMEND to read as follows:
 - “G. Each Prime Contractor is responsible to provide a trailer or suitable work space as needed to properly manage their respective scope of work.”
2. Paragraph 3.3, A., AMEND the first sentence to read as follows:
 - “A. Each Prime Contractor is responsible to provide a trailer or suitable work space as needed to properly manage their respective scope of work. Locate field offices, . . .”

3. Paragraph 3.3, C., AMEND to read as follows:

“C. Each prime contractor shall provide, if necessary to properly manage their work, an insulated, weathertight temporary office of sufficient size to accommodate required office personnel at the Project Site. Keep the . . .”

PROJECT MANUAL MODIFICATIONS - PLUMBING

ITEM 6-C-5: Refer to SECTION 22 16 23 - NATURAL GAS PIPING.

1. Paragraph 2.5, ADD the following:

“H. Gas Cock – Type “B”: Deck mounted turret with one outlet.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Chicago Faucets; a Geberit company; Model 980-VP909CAGCP or comparable product by one of the following:
 - a. T & S Brass and Bronze Works, Inc.
 - b. WaterSaver Faucet Company.
 - c. Zurn Plumbing Products Group.
2. Service Fittings: Provide units that comply with SEFA 7, "Laboratory and Hospital Fixtures - Recommended Practices." Provide fittings complete with washers, locknuts, nipples, and other installation accessories. Include wall and deck flanges, escutcheons, handle extension rods, and similar items.
 - a. Provide units that comply with "Vandal-Resistant Faucets and Fixtures" recommendations in SEFA 7.
 - b. Provide units certified for gas service per ANSI Z21.15B-2006/CSA by the Canadian Standards Association.
3. Materials: Fabricated from cast or forged red brass unless otherwise indicated.
4. Finish: Chromium plated.
5. Ball Valves: Chrome-plated ball and PTFE seals. Handle requires no more than 5 lbf (22 N) to operate. Provide units designed for working pressure up to 75 psig (520 kPa), with serrated outlets with integral ball check.
6. Handles: Provide lever-type handles for ball valves unless otherwise indicated. Lever handle aligns with outlet when valve is closed and is perpendicular to outlet when valve is fully open.
7. Service-Outlet Identification: Provide color-coded plastic discs with embossed identification, secured to each service-fitting handle to be tamper resistant. Comply with SEFA 7 for colors and embossed identification.”

ITEM 6-C-6: Refer to SECTION 22 42 16.16 - COMMERCIAL SINKS

1. Paragraph 2.1, D., 1., AMEND to read as follows:

“1. Fixture: Refer to Specification Section 12 32 13 - Manufactured Wood-Veneer-Faced Casework for epoxy. . .”

2. Paragraph 2.1, E., 1., AMEND to read as follows:

“1. Fixture: Refer to Specification Section 12 32 13 - Manufactured Wood-Veneer-Faced Casework for epoxy. . .”

3. Paragraph 2.1, F., 1., AMEND to read as follows:

“1. Fixture: Refer to Specification Section 12 32 13 - Manufactured Wood-Veneer-Faced Casework for epoxy. . .”

4. Paragraph 2.1, G., 1., AMEND to read as follows:

“1. Fixture: Refer to Specification Section 12 32 13 - Manufactured Wood-Veneer-Faced Casework for epoxy. . .”

PROJECT MANUAL MODIFICATIONS - MECHANICAL

ITEM 6-C-7: Refer to SECTION 23 09 00 – INSTRUMENTATION AND CONTROL FOR HVAC

1. Paragraph 1.2, AMEND to read as follows:

“1.2 SUMMARY

- A. By Base-Bid, the Mechanical Contractor (MC) is to provide temperature controls as shown and as specified herein and in section 01 12 00 SUMMARY OF PROJECT in coordination with others.
- B. The Owner intends to solicit temperature controls work through a State Contract agreement. Refer to the scope of work described herein as Temperature Controls Contractor (TCC) and 01 12 00 SUMMARY OF PROJECT.
- C. By Bid Alternate #4 - Temperature Controls (Mechanical Work Alternate), a Temperature Controls Contractor (TCC) is to provide temperature controls. Refer to the scope of work described herein as Temperature Controls Contractor (TCC) and refer also to 01 12 00 SUMMARY OF PROJECT. The delineation of Scope of Work between the Temperature Controls Contractor (TCC) and Mechanical Contractor (MC) is as follows:
 - 1. State Education Department public bidding requirements include publicly bid installation of standardized equipment purchased by the Owner. Provide installation of the Energy Management and Control System (EMCS) in full accordance with this specification, by a fully qualified Temperature Controls Contractor (TCC) as described in quality assurance below and as approved by the Architects and Engineers, to be paid for by the Contractor responsible for HVAC Work as a part of their work. Include both removals of existing controls as specified below and installation of new controls as described herein:
 - 2. The TCC shall furnish controls equipment to MC:
 - a. Loose dampers associated with louvers, exhaust fans and gravity hoods.
 - b. Control valves.
 - c. Sensor wells to fit their sensors.
 - d. All operator workstations, controllers, control panels enclosures, and field wiring.
 - e. Exception: actuated devices or sensors that must be an integral part of the equipment (ex: factory installed mixing box dampers, or internal packaged refrigeration system safety controls/ shall be by MC.
 - 3. The MC shall install controls equipment including the following (all final designed and furnished by the TCC).
 - a. Loose dampers, control valves, piping sensor wells and duct penetration interface as required to maintain the integrity of their piping and ductwork.
 - 4. MC shall furnish control components associated with the VRF system.
 - 5. TCC shall install control components associated with the VRF system and provide controls project management, software, programming, installation instructions, check out/installation verification and controls commissioning.

6. TCC shall provide controls project management, software, programming, installation instructions, check out/installation verification and controls commissioning.
 7. TCC shall provide Owner instruction.
- D. This section describes the requirements for a complete Energy Management and Control System (EMCS) for building mechanical systems and components, based upon Direct Digital Control (DDC) logic including WEB served operator interface via one new as well as the existing computer Operator Work Stations, distributed microprocessor controls, and integrated electronic components, interfaces, and actuation, all installed complete as specified.
- E. Perform all work in cooperation with the Owner, Architect, Construction Manager, and other Prime Contractors. Coordinate all work with the construction schedule established by the Owner, Architect, and Construction Manager, and immediately report any delays including circumstances causing the delays.
- F. It is the Owner's intent to extend the School District's existing Johnson Controls Facility Explorer Energy Management System (EMCS). This shall be accomplished through:
1. Removal of existing stand-alone electronic control systems included in the work areas indicated on the drawings.
 2. Removal of all existing pneumatic control components included in the work areas indicated on the drawings.
 3. Providing new controls included in the work areas indicated on the drawings complete as specified herein.
 4. Provide new programming and graphic displays for all new controls, and custom configure graphic displays to meet Owner and Engineer requirements.
 5. Provide extension of (EMCS) communication network to the work areas indicated on the drawings as required to furnish a complete interoperable control system.
 6. Provide full control capability as described in the sequence of operation for new equipment via field mounted controls or interfacing with equipment furnished with BACnet communication capability.
 7. Provide wireless control capability for the District Bus Garage and Pump House to the EMCS.
- G. Provide each of the following portions of the complete EMCS as a standalone system that can communicate with any other Direct Digital Control (DDC) system which is following the same protocol:
1. Operator Work Stations (OWS): Provide one desk top computer as a complete OWS, installed at a location of the Owner's choosing; and integrate this project's controls complete with the EMCS at the District's facilities offices and other buildings. Provide software and programming for new OWS and update software at existing EMCS complete to incorporate this addition. Provide guaranteed seamless two way communications from each, including full control, with the EMCS provided as a part of this project and the existing campus EMCS.
 2. The OWS shall monitor, display, and control information from the EMCS through one software package. Rebooting of the OWS, or opening a separate program to access the existing building's multiple systems is not acceptable.
 3. The new OWS shall meet the hardware and performance requirements of this specification.
 4. The OWS shall allow customization of the system as described in this specification.

5. The OWS shall:
 - a. Provide new color graphic control panels for all equipment provided or modified as part of this project, as outlined below and on the drawings,
 - b. Allow operators to view and work with all DDC points associated with all DDC equipment provided or modified as part of this project,
 - c. Allow operators to create custom graphics and/or control programming generation for any and all new equipment.

6. Network Control Unit (NCU): Provide central processor WEB server capability for and fully integrated two way communications with all energy use and management equipment provided or modified by this project, along with any third party stand alone controls provided by the manufacturers of the Air Handlers, Refrigeration Machinery, Boilers, and Variable Speed Drives. NCU shall be capable of supporting a minimum of 127 field devices, providing reserve capacity for addition of future points and expansion of DDC system into building. The DDC system's NCU shall communicate with the OWS entirely using the BACnet protocol, with a conformance class of 5, as defined in the latest officially amended version of ANSI/ASHRAE 135-2004.

7. Distributed Controls: System controls shall include but not be limited to all controllers, sensors, devices, wiring, and all other hardware and software required to perform all of the functions and controls described later in this specification and on the drawings, including fully integrated two-way control of boilers, chiller, condensing units, pumps, VSDs, heat exchanger, and all associated temperatures, pressures, and other controllable parameters of mechanical equipment and systems provided or modified as part of this project. Provide control through the EMCS as outlined in the general controls sequences of operations below, as shown on the project drawings, and with controls similar to as shown where the exact configuration is not explicitly covered by the drawing and specification sequence of operations.

8. Engineer's Office: Provide password and any other hardware and software as required to enable Engineer to communicate directly, with full graphics and control capability, with the EMCS from the Engineer's office over an internet browser interface. Install complete early in project. Engineer will utilize to check progress of installation, to check operation of system during the punch list period, and to monitor system operation after completion of the work."

PROJECT MANUAL MODIFICATIONS - ELECTRICAL

ITEM 6-C-8: Refer to SECTION 26 27 26 - WIRING DEVICES

1. DELETE section in its entirety and, ADD new section attached to this addendum.

DRAWING MODIFICATIONS - LANDSCAPE

ITEM 6-C-9: Refer to DRAWING AC100

1. Site Phasing Note 6, AMEND to read as follows:
 - "6. AT STAGING AND OTHER TEMPORARY AREAS ON EXISTING PAVING: CONTRACTOR TO DOCUMENT EXISTING PAVEMENT CONDITIONS. PROVIDE PAVEMENT SEALING. IF PAVEMENT IS SUBSTANTIALLY DAMAGED DURING CONSTRUCTION, MILL 1 ½" OF EXISTING PAVING AND REPLACE WITH 1 ½" TOP COURSE. WORK IS TO OCCUR SUMMER 2022."

ITEM 6-C-10: Refer to DRAWING ZC504

1. Detail 2, AMEND Note which reads “6” FND ABOVE FINISH GRADE” to read as follows:

“TOP OF FOUNDATION 6” ABOVE FINISHED GRADE. REFER TO 22 12 19 FOR FOUNDATION DESIGN.”

DRAWING MODIFICATIONS – ELECTRICAL

ITEM 6-C-11: Refer to DRAWING AE600

1. DELETE drawing in its entirety and, ADD new drawing attached to this addendum.

END OF ADDENDUM



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 3/2/2021

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Stephen Vieira
Bidder Company Name: Landscape Unlimited Inc.
Bidder Phone: 9142825623
Bidder Email Address: M2LUI3@gmail.com

Question Pertains to: well and pump specs. FYI - we drilled a well deeper in 1977 at the school which went 425' deep with 75 Gallons per min. Is it possibly the same well?
Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific) - How many gallon per min. do we expect well to produce after hydrofracturing?
- What horsepower pump is currently in use?
- Is the power supply single phase or three phase if three phase 230V or 460V?
CHRIS BEAL
P F BEAL & SONS, INC
4 PUTNAM AVENUE
BREWSTER, NY 10809
845-279-2460

Review by Architect/Engineers: _____ **Responded By:** DCG **Date:** 3/4/2021

1. It could be the same well. The well for this project is by the HS tennis courts.
2. We expect it to be more than the current 50 GPM.
3. Current pump is reported to be 3 horsepower
4. Power supply to new well pump is 208 volt, 3 phase.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



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SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date:

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Nick Lopilato
Bidder Company Name: Clean Air Quality Service, Inc.
Bidder Phone: 914-769-7700 x102
Bidder Email Address: nlopilato@caqs.com

Question Pertains to:

Drawing Number: HP051 & BP050
Plan Area:
Room Number: N/A
Drawing Detail Number: HP051 - 4 - "Water Treatment Hydraulic Schematic & "BP050 - 1 - "Second Floor Key Plan"
Specification Section: 01 12 00

Question: (Please be specific)

HP051

Which contractor is responsible for furnishing and installing the new 57,000 aboveground potable water storage tank? This question was asked in Addendum #2 (PDF page 6 of 44) & Addendum #4 (PDF page 24 of 76) with answers pointing to specification sections. There is no conclusive answer to this question on the drawings or specifications. Please provide an answer.

BP050

Which contractor is responsible for the removal of existing 12,000 gallon underground water storage tank? Usually it would be the responsibility of the site contractor but there are no specifications for removal or a clear "summary of work" for this task.

L Rodriguez/C Glaubitz

Review by Architect/Engineers:

Responded By: _____

Date: _____

3/4/21

Refer to Addendum #6.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



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Bidder Contact Person: Nick Lopilato
Bidder Company Name: Clean Air Quality Service, Inc.
Bidder Phone: 914-769-7700 x102
Bidder Email Address: nlopilato@caqs.com

Question Pertains to:

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Plan Area:
Room Number: N/A
Drawing Detail Number: HP051 - 4 - "Water Treatment Hydraulic Schematic & "BP050 - 1 - "Second Floor Key Plan"
Specification Section: 01 12 00

Question: (Please be specific)

HP051

Which contractor is responsible for furnishing and installing the new 57,000 aboveground potable water storage tank? This question was asked in Addendum #2 (PDF page 6 of 44) & Addendum #4 (PDF page 24 of 76) with answers pointing to specification sections. There is no conclusive answer to this question on the drawings or specifications. Please provide an answer.

BP050

Which contractor is responsible for the removal of existing 12,000 gallon underground water storage tank? Usually it would be the responsibility of the site contractor but there are no specifications for removal or a clear "summary of work" for this task.

Review by Architect/Engineers: C Glaubitz **Responded By:** _____ **Date:** 3/4/21

HP051 - Refer to Addendum #6.
BP050 - P drawings are assigned to the plumbing contractor per 01 12 00.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



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Date:

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Bidder Contact Person: Nick Lopilato
Bidder Company Name: Clean Air Quality Service, Inc.
Bidder Phone: 914-769-7700 x102
Bidder Email Address: nlopilato@caqs.com

Question Pertains to:

Drawing Number: BP050
Plan Area:
Room Number: N/A
Drawing Detail Number: "BP050 - 1 - "Second Floor Key Plan"
Specification Section: 01 12 00

Question: (Please be specific)

BP050

Since the plumbing contractor is responsible for the removal of the 12,000 gallon tank (based on previous RFI response), is the excavation, backfill, finish and grading by the plumbing contractor as well? If so, can you provide specifications/requirements of the demolition, disposal, site requirements for excavation, type of backfill, finish, grading, etc.?

L Rodriguez/C Glaubitz

Review by Architect/Engineers:

Responded By: _____

Date: _____

3/5/21

Refer to 01 12 00 paragraph 1.6, D, 2:

The Site Work Construction Contract shall provide shoring and bracing and excavation for all work outside of the existing building, and all excavation and backfill for other contractors related to site renovation work and athletic field work.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 3/2/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Karen Panarella
Bidder Company Name: Joe Lombardo Plumbing & Heating of Rockland Inc
Bidder Phone: 845-357-6537
Bidder Email Address: karen@josephlombardo.com

Question Pertains to: D. 1./E.1./F.1./G.1. Fixture: Refer to Specification Section 12 32 16 “Manufactured Plastic-Laminate-Faced-Casework” for epoxy resin sink bowls.
Drawing Number: D.2./E.2./F.2./G.2. Faucet(s): Accessible manual type, two-lever-handle mixing valve with
Plan Area: restricted swing spout.
Room Number:
Drawing Detail Number:
Specification Section: SECTION 22 42 16.16 - COMMERCIAL SINKS

Question: (Please be specific)

There is no Spec Section 12 32 16 listed. Does this section exist?
Please advise who is responsible for providing the sinks & faucets regarding the missing spec section as described above?

Review by Architect/Engineers: _____ **Responded By:** FEI **Date:** 4/6/21

1. The following is a request for clarification regarding the specification section 12 32 16 "Manufactured Plastic-Laminate-Faced-Casework" for epoxy resin sink bowls. The specification section is not listed in the specification. Please advise who is responsible for providing the sinks & faucets regarding the missing spec section as described above.

40 The following is a request for clarification regarding the specification section 12 32 16 "Manufactured Plastic-Laminate-Faced-Casework" for epoxy resin sink bowls. The specification section is not listed in the specification. Please advise who is responsible for providing the sinks & faucets regarding the missing spec section as described above.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



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Project No.: 121111-19002

Date: 3/2/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Karen Panarella
Bidder Company Name: Joe Lombardo Plumbing & Heating of Rockland Inc
Bidder Phone: 845-357-6537
Bidder Email Address: karen@josephlombardo.com

Question Pertains to: Specs for gas cocks type B, safety station

Drawing Number: AP600
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific)

please provide the specs for type ""B" gas cocks,and Safety station

Review by Architect/Engineers: _____ **Responded By:** DCG **Date:** 3/4/2021

1. Type B gas cocks will be included in forthcoming addendum. Single outlet assembly.
2. Safety station: Refer to specification section 12 32 13, Paragraph 2.7, L

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



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INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetratech.com

Project No.: 121111-19002

Date: 2/25/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Carlos Flores
Bidder Company Name: Mehl Electric
Bidder Phone: 845 735 4004
Bidder Email Address: carlos@mehlnet.com

Question Pertains to: Summer 2021 Panel install Schedule

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific) 1 Does all the Gear need to be replace during the summer of 2021, with procurement, submittals, covid delays, depending on when a contract is issued. It seems aggressive to get all those panels and MDP furnished/submitted/delivered/intalled/tested this summer. Could the Gear be split into the job over the 2 summers or even throughout the school year 2021 going into the winter 2022? Please advise if this is acceptable?

Review by Architect/Engineers:

3/4/21 - Response by L Rodriguez/C Glaubitz:
 Adjustments to the installation schedule can be negotiated, provided that systems including life safety, HVAC and power are operational as required in the documents including the schedule.



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SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 3/1/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Carlos Flores
Bidder Company Name: Mehl Electric
Bidder Phone: 845 735 4004
Bidder Email Address: carlos@mehlnet.com

Question Pertains to: Panel replacement

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific) 1 Your answer to RFI 22 states that there is no work required with panel SDP listed on both AE700 and AE600, but your addendum 4 drawings still show the panel listed in the schedule, and per your answer to RFI 15 you stated all panels shown on AE600 are to be replace. Please clarify what the scope is for panel SDP shown on both AE700 & AE600, Gear vendors are asking what to quote for this specific panel? or if its even a panel at all, please clarify/ confirm scope?

Review by Architect/Engineers:

REFER TO BID ADDENDUM NO 6

CREGA

3/2/21



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Bidder Contact Person: Carlos Flores
Bidder Company Name: Mehl Electric
Bidder Phone: 845 735 4004
Bidder Email Address: carlos@mehlnet.com

Question Pertains to: Communications

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section: 27 15 00

Question: (Please be specific) 1 Please verify the type of cable required, as CAT6 is called out 27 15 00 2.4 B, but CAT6A for patchcords 27 15 00 2.5 E. Which do we need to use CAT6 or CAT6A?

-

Review by Architect/Engineers:

CAT6A FOR ALL

CREGA

3/2/21



TETRA TECH
ARCHITECTS & ENGINEERS

INSTRUCTIONS TO BIDDERS
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Project No.: 121111-19002

Date: 3/2/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Carlos Flores
Bidder Company Name: Mehl Electric
Bidder Phone: 845 735 4004
Bidder Email Address: carlos@mehlnet.com

Question Pertains to: Fire Alarm

Drawing Number: AE050, AE200
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific) 1 Please confirm if we are replacing exiting FACP with new? Addendum 3 plan AE200 removed the note to replace panel, but AE050 still shows note 2 to replace existing next to FACP? Are we replacing, or using existing FACP panel.
2. Is the Existing FACP panel adequate to fit all the new devices shown on plans?
3. Can we use any notifier vendor to supply the parts and smarts for the addition of devices to the existing system.

Review by Architect/Engineers:

1. NEW DEVICES ADDED TO EXISTING PANEL
2. REFER TO BID ADDENDUM NO 3 AND 4 THAT LISTS CONTACT INFORMATION FOR MANUFACTURER.

CREGA

3/2/21



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 2/26/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: MIKE DEMARTINO
Bidder Company Name: NICKERSON CORP.
Bidder Phone: 631-666-0200 X235
Bidder Email Address: demartino@nickersoncorp.com

Question Pertains to:

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section: CONTRACT 6 - CASEWORK AND LAB EQUIPMENT CONTRACT

Question: (Please be specific)

- Contract 6 - Casework and Lab Equipment Note 1.12.A.4 notes Temporary Facilities as noted in Section 015000. Note 2.2.G and H of Section 015000 indicates Temporary Offices and Temporary Toilet Units. Please confirm Temporary Offices and Temporary Toilet Units are required for Contract 6 - Casework and Lab Equipment Contract.

L Rodriguez/C Glaubitz

Review by Architect/Engineers:

Responded By: _____

Date: 3/4/21

GC is required by 3.1, F to provide sanitary facilities. Refer to Addendum #6 for temporary offices.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 3-3-2020

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: PETER MADDOX
Bidder Company Name: RICHARDS CORPORATION
Bidder Phone: 860-583-9229
Bidder Email Address: pmaddox@richardscorp.com

Question Pertains to:

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number: AC100 PHASING NOTE 6
Specification Section:

Question: (Please be specific)

PHASING NOTE 6 ON AC 100 CALLS FOR THE CONTRACTOR TO REMOVE AND REPLACE EXISTING PAVING USED FOR STAGING. THE HS SITE LOGISTICS PLAN PROVIDED IN ADDENDUM 4 SHOWS A STAGING AREA ON AN EXISTING PARKING LOT.

WILL THE SITEWORK CONTRACTOR BE REQUIRED TO REMOVE AND REPLACE THIS ASPHALT?

L Rodriguez/C Glaubitz

Review by Architect/Engineers:

Responded By: _____ **Date:** 3/4/21

Refer to Addendum #6 for adjustment to this note.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetratech.com

Project No.: 121111-19002

Date:

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Dylan Scannell
Bidder Company Name: S&L Plumbing and Heating, corp.
Bidder Phone: 914.574.7771
Bidder Email Address: DScannell@SLplumbing.net

Question Pertains to:

Drawing Number: HVAC
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific)

The existing BMS is a Johnson Control Facility explorer utilizing a LON network . Do we include the control price in our contract for HVAC?

L Rodriguez/C Glaubitz

Review by Architect/Engineers:

Responded By: _____ **Date:** 3/4/21

Refer to Addendum #6.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 2/16/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Jim Sass III
Bidder Company Name: J&J Sass Electric Inc.
Bidder Phone: 845-331-8666
Bidder Email Address: jimsass3@jjsass.com

Question Pertains to:

Drawing Number: AE165
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific)

Please provide a make and model # or specs for the cord reels

Review by Architect/Engineers:

Responded By: CREGA **Date:** 3/2/21

REFER TO BID ADDENDUM NO 6.

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 2/16/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: Jim Sass III
Bidder Company Name: J&J Sass Electric Inc.
Bidder Phone: 845-331-8666
Bidder Email Address: jimsass3@jjsass.com

Question Pertains to:

Drawing Number: AE200, AE201, AE202
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:

Question: (Please be specific)

Please confirm if each computer outlet gets 1 CAT 6 cable back to the nearest network rack. Are all the network racks existing and will any additional patch panels be needed?

Review by Architect/Engineers: _____ **Responded By:** CREGA **Date:** 3/2/21

**AE200-202 ARE FIRE ALARM DEVICES ONLY- REFER TO
BID ADDENDUMS. YES ONE TO FIRE ALARM PANEL.**

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetrattech.com

Project No.: 121111-19002

Date: 2/18/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: [Andrew Ross](#)
Bidder Company Name: [Tristate Contract Sales LLC](#)
Bidder Phone: [845-782-2614](#)
Bidder Email Address: andrew@tristatecontractsales.com

Question Pertains to: [Contract 6 CE / Casework](#)

Drawing Number:
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section: [123213,115363,123217,125651](#)

Question: (Please be specific)

[Contract 6CE casework](#)
[Section 115363 – Laboratory Equipment and Accessories describe Fire Blankets and First Aid Kits. I don't see either item on the architectural details. are they required if so where are they shown on the drawings.](#)
[Section 123213 -Wood casework the spec calls for label holders for all drawers as shown on drawings. None are shown on the drawings. Are they required if so where on the drawers .](#)
[Also they state lable holders to be on mailbox units. Please clarify where the mailbox units can be found on the drawings .](#)
[Please clarify where counter top grilles and toe kick grilles are required. No grilles or fin tube is shown on the layout drawings. Is it at all window elevations ?](#)

Review by Architect/Engineers: _____ **Responded By:** [mhhunt](#) **Date:** [3-2-21](#)

[Refer to upcoming addendum for questions regarding label holder.](#)
[Fire blankets and kits are to be per each science room as indicated in notes and located during construction phase.](#)
[Refer to all drawings and casework details and sections for requirement regarding grilles.](#)

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



INSTRUCTIONS TO BIDDERS
ATTACHMENT #1:
PRE-BID REQUEST FOR INTERPRETATION FORM

SUBMIT FORM BY EMAIL TO INE.Mahopac@tetratech.com

Project No.: 121111-19002

Date: 3/2/21

Project Name: Reconstruction to Mahopac High School, Mahopac Middle School, Mahopac Falls School, Bus Garage, and New Pump House

Bidder Contact Person: [Andrew Ross](#)
Bidder Company Name: [Tristate Contract Sales LLC](#)
Bidder Phone: [845-782-2614](#)
Bidder Email Address: andrew@tristatecontractsales.com

Question Pertains to: [Contract 6 CE / Casework](#)

Drawing Number: AA103, AA400
Plan Area:
Room Number:
Drawing Detail Number:
Specification Section:123217

Question: (Please be specific)

[Casework Contract 6](#)
[Music casework spec section 123217 are doors required on the Wenger music casework . It is not clear on the drawings or in the specification](#)
[Please clarify.](#)

Review by Architect/Engineers: _____ **Responded By:** [mhhunt](#) **Date:** [3-2-21](#)

REFER TO ELEVATON AND MODEL NUMBERS

Submit requests not less than 5 working days prior to the specified Bid Opening date and time. In the event that this question requires clarification or modification of the Bidding Documents, such written information can only be provided by formal Addendum, distributed to all plan holders.



10 Brown Rd
Ithaca, NY 14850
(607)277-7100

Ithaca, New York
Farmingdale, New York
Albany, New York

BID FROM (Bidder's Name) : _____

(Address) : _____

Bidder's Telephone : _____

Bidder's Facsimile (Fax) : _____

Bidder's E-mail Address : _____
(if applicable)

BID FORM
(submit in duplicate)

CONTRACT: CONTRACT 3 HC – MECHANICAL WORK

PROJECT TITLE: RECONSTRUCTION TO
MAHOPAC HIGH SCHOOL
MAHOPAC MIDDLE SCHOOL
MAHOPAC FALLS SCHOOL
BUS GARAGE
NEW PUMP HOUSE

DATE: AUGUST 21, 2020

PROJECT NO.: 121111-19002

BID TO: Board of Education
Mahopac Central School District
179 East Lake Boulevard
Mahopac, New York 10541

The Bidder hereby certifies that it has examined and fully understands the requirements and intent of the Bidding Documents, including the Bidding Requirements and proposed Contract Documents; and proposes to furnish all labor, materials, and equipment necessary to complete the Work on, or before, the dates specified in the Contract Documents for the **BASE BID** sum of:

_____ (words)

_____ (\$ _____) (figures)

Show all amounts in both words and figures; in the event of a discrepancy between amounts written in words and figures, the amount written in words shall govern.

Refer to Division 01 Section "Allowances" for description of allowances to be included in the Base Bid above.

ALTERNATES

Indicate in the spaces provided below the amount to be added to or the amount to be deducted from (as applicable) the Base Bid if the Owner accepts the following Alternates described in Division 01 Section "Alternates".

Include in the amount of each Alternate, all labor, materials, overhead and profit, modification of Work specified in the Contract Documents, and additional work that may be required by acceptance of the Alternate.



ALTERNATE NO. 4 – TEMPERATURE CONTROLS

ADD to the Base Bid the sum of:

_____ (\$ _____)
(words) (figures)



BID FORM
ATTACHMENT #1

GENERAL CONDITIONS TO BID
NON-COLLUSIVE BIDDING CERTIFICATION

No bid will be accepted that does not have this form completely executed.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

- (a) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or any competitor;
- (b) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;
- (c) No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition;
- (d) The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the bidder as well as to the person signing in its behalf;
- (e) That attached hereto (if corporate bidder) is a certified copy of resolution authorizing the execution of this certified by the signature of this bid or proposal in behalf of the corporate bidder.

(Individual)

(Corporation)

Dated: _____ By _____
(Signature of Officer)

This Non-Collusive Bidding Certificate must be submitted with the bid.

BID FORM
ATTACHMENT #2

CERTIFIED CORPORATE RESOLUTION

RESOLVED THAT _____ be authorized to sign and submit the bid or proposal of this corporation for the following project:

and to include in such bid or proposal the certificate as to non-collusion required by section one hundred three-d (103-d) of the general municipal law as to the act and deed of such corporation, and for any inaccuracies or mis-statements in such certificate this corporate bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the resolution and adopted by

_____ at a meeting of its board of directors held on the
_____ day of _____ 20__ .

(Secretary)

BID FORM
ATTACHMENT #3

IRANIAN ENERGY DIVESTMENT CERTIFICATION

**Pursuant to Section 103-g
Of the New York State
General Municipal Law**

- A. By submission of this bid/proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the New York State Finance Law.
- B. A Bid/Proposal shall not be considered for award, nor shall any award be made where the condition set forth in Paragraph A above has not been complied with; provided, however, that in any case the bidder/proposer cannot make the foregoing certification set forth in Paragraph A above, the bidder/proposer shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where Paragraph A above cannot be complied with, the Purchasing Unit to the political subdivision, public department, agency or official thereof to which the bid/proposal is made, or his designee, may award a bid/proposal, on a case by case business under the following circumstances:
1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder/Proposer has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
 2. The political subdivision makes a determination that the goods or services are necessary for the political subdivision to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.

Signature

Title

Date

Company

SECTION 26 27 26 - WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Receptacles, receptacles with integral GFCI, and associated device plates.
 - 2. Weather-resistant receptacles.
 - 3. Snap switches.

1.3 DEFINITIONS

- A. EMI: Electromagnetic interference.
- B. GFCI: Ground-fault circuit interrupter.
- C. Pigtail: Short lead used to connect a device to a branch-circuit conductor.
- D. RFI: Radio-frequency interference.
- E. TVSS: Transient voltage surge suppressor.
- F. UTP: Unshielded twisted pair.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Receptacles for Owner-Furnished Equipment: Match plug configurations.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: List of legends and description of materials and process used for premarked wall plates.

1.6 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.7 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For wiring devices to include in all manufacturers' packing-label warnings and instruction manuals that include labeling conditions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:
 - 1. Cooper Wiring Devices; Division of Cooper Industries, Inc. (Cooper).
 - 2. Hubbell Incorporated; Wiring Device-Kellems (Hubbell).
 - 3. Leviton Mfg. Company Inc. (Leviton).
 - 4. Pass & Seymour/Legrand (Pass & Seymour).
- B. Source Limitations: Obtain each type of wiring device and associated wall plate from single source from single manufacturer.

2.2 GENERAL WIRING-DEVICE REQUIREMENTS

- A. Wiring Devices, Components, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Comply with NFPA 70.
- C. Devices that are manufactured for use with modular plug-in connectors may be substituted under the following conditions:
 - 1. Connectors shall comply with UL 2459 and shall be made with stranded building wire.
 - 2. Devices shall comply with the requirements in this Section.

2.3 STRAIGHT-BLADE RECEPTACLES

- A. Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 Configuration 5-20R, UL 498, and FS W-C-596.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper; 5351 (single), CR5362 (duplex).
 - b. Hubbell; HBL5351 (single), HBL5352 (duplex).
 - c. Leviton; 5891 (single), 5352 (duplex).
 - d. Pass & Seymour; 5361 (single), 5362 (duplex).

2.4 GFCI RECEPTACLES

A. General Description:

1. Straight blade, feed and non-feed-through type.
2. Comply with NEMA WD 1, NEMA WD 6, UL 498, UL 943 Class A, and FS W-C-596.
3. Include indicator light that shows when the GFCI has malfunctioned and no longer provides proper GFCI protection.

B. Duplex GFCI Convenience Receptacles, 125 V, 20 A:

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper; VGF20.
 - b. Hubbell; GFR5352L.
 - c. Pass & Seymour; 2095.
 - d. Leviton; 7590.

2.5 TOGGLE SWITCHES

A. Comply with NEMA WD 1, UL 20, and FS W-S-896.

B. Switches, 120/277 V, 20 A:

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Single Pole:
 - 1) Cooper; AH1221.
 - 2) Hubbell; HBL1221.
 - 3) Leviton; 1221-2.
 - 4) Pass & Seymour; CSB20AC1.
 - b. Two Pole:
 - 1) Cooper; AH1222.
 - 2) Hubbell; HBL1222.
 - 3) Leviton; 1222-2.
 - 4) Pass & Seymour; CSB20AC2.
 - c. Three Way:
 - 1) Cooper; AH1223.
 - 2) Hubbell; HBL1223.
 - 3) Leviton; 1223-2.
 - 4) Pass & Seymour; CSB20AC3.

- d. Four Way:
 - 1) Cooper; AH1224.
 - 2) Hubbell; HBL1224.
 - 3) Leviton; 1224-2.
 - 4) Pass & Seymour; CSB20AC4.

C. Key-Operated Switches, 120/277 V, 20 A:

- 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper; AH1221L.
 - b. Hubbell; HBL1221L.
 - c. Leviton; 1221-2L.
 - d. Pass & Seymour; PS20AC1-L.
- 2. Description: Single pole, with factory-supplied key in lieu of switch handle.

D. Single-Pole, Double-Throw, Momentary-Contact, Center-off Switches: 120/277 V, 20 A; for use with mechanically held lighting contactors.

- 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper; 1995.
 - b. Hubbell; HBL1557.
 - c. Leviton; 1257.
 - d. Pass & Seymour; 1251.

E. Key-Operated, Single-Pole, Double-Throw, Momentary-Contact, Center-off Switches: 120/277 V, 20 A; for use with mechanically held lighting contactors, with factory-supplied key in lieu of switch handle.

- 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper; 1995L.
 - b. Hubbell; HBL1557L.
 - c. Leviton; 1257L.
 - d. Pass & Seymour; 1251L.

2.6 WALL PLATES

A. Single and combination types shall match corresponding wiring devices.

- 1. Plate-Securing Screws: Metal with head color to match plate finish.
- 2. Material for Finished Spaces: 0.035-inch- (1-mm-) thick, satin-finished, Type 302 stainless steel.

3. Material for Unfinished Spaces: Galvanized steel.
 4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet and damp locations.
- B. Wet-Location, Weatherproof Cover Plates: NEMA 250, complying with Type 3R, weather-resistant, die-cast aluminum with lockable cover.
- C. Cover Plates:
1. Stainless Steel Cover Plates: Type 302 or 304, satin finish, 0.040 inch thick, accurately die cut, protected with release paper. Flush mounting plates shall be beveled with smooth rolled outer edge. Surface mounting plates shall be beveled and pressure formed for smooth edge to fit box. Single and combination plates as required to match types and sizes of specified wiring devices.
 2. Weatherproof Cover Plates: Receptacles in wet locations shall be installed with a hinged outlet cover/enclosure clearly marked "Suitable For Wet Locations While in Use" and "UL Listed". There must be a gasket between the enclosure and the mounting surface, and between the hinged cover and the mounting plate/base to assure proper seal. The installation shall be in compliance with NEC Article 410-57(b). Specification Grade die cast aluminum (copper free alloy 360) as manufactured by Hubbell Corp. (or approved equal).
- D. Material for unfinished spaces: Galvanized steel.

2.7 CORD REEL

A. Cord Reel For Receptacle

1. Standard duty cord reel constructed with oversize main shaft, bearings, and main spring; heavy gauge cable drum and housing. High capacity slip rings, oversize brushes, and copper graphite contact points, anchored in floating brush holder.
2. Instant action automatic lock providing positive foolproof stop at desired point, regardless of mounting position or speed of retraction
3. Convert easily to constant tension by rotating external control
4. Lead-in and working cables of No. 14 AWG 250 volt oil resisting safety yellow SJO cord.
5. Large internal radius of cable guide casting to prevent snubbing and abrasion of cable.
6. External tension adjustment to permit spring tension to be increased or decreased to meet job requirements.
7. Lifetime lubricated, self-contained main motor springs.
8. Declutching feature to eliminate breakage on rewind.

9. 35 ft. of 3-conductor cable.
10. Similar to "Cord Reel No. 990" by Daniel Woodhead Company.

2.8 FINISHES

- A. Device Color:
 1. Wiring Devices Connected to Normal Power System: To match existing.
 2. Wiring Devices Connected to Emergency Power System: Red.
- B. Wall Plate Color: For plastic covers, match device color.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with NECA 1, including mounting heights listed in that standard, unless otherwise indicated.
- B. Coordination with Other Trades:
 1. Protect installed devices and their boxes. Do not place wall finish materials over device boxes and do not cut holes for boxes with routers that are guided by riding against outside of boxes.
 2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
 3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
 4. Install wiring devices after all wall preparation, including painting, is complete.
- C. Conductors:
 1. Do not strip insulation from conductors until right before they are spliced or terminated on devices.
 2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
 3. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.

4. Existing Conductors:
 - a. Cut back and pigtail, or replace all damaged conductors.
 - b. Straighten conductors that remain and remove corrosion and foreign matter.
 - c. Pigtail existing conductors is permitted, provided the outlet box is large enough.

D. Device Installation:

1. Replace devices that have been in temporary use during construction and that were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that are not less than 6 inches in length.
5. When there is a choice, use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, two-thirds to three-fourths of the way around terminal screw.
6. Use a torque screwdriver when a torque is recommended or required by manufacturer.
7. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
8. Tighten unused terminal screws on the device.
9. When mounting into metal boxes, remove the fiber or plastic washers used to hold device-mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:

1. Install ground pin of vertically mounted receptacles down, and on horizontally mounted receptacles to the right.

F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

G. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical. Group adjacent switches under single, multigang wall plates.

3.2 GFCI RECEPTACLES

- A. Install non-feed-through-type GFCI receptacles where protection of downstream receptacles is not required.

3.3 IDENTIFICATION

- A. Comply with Section 26 05 53 "Identification for Electrical Systems."
- B. Identify each receptacle with panelboard identification and circuit number. Use hot, stamped, or engraved machine printing with black-filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

3.4 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Test Instruments: Use instruments that comply with UL 1436.
 - 2. Test Instrument for Convenience Receptacles: Digital wiring analyzer with digital readout or illuminated digital-display indicators of measurement.
- B. Tests for Convenience Receptacles:
 - 1. Line Voltage: Acceptable range is 105 to 132 V.
 - 2. Percent Voltage Drop under 15-A Load: A value of 5 percent or higher is unacceptable.
 - 3. Ground Impedance: Values of up to 2 ohms are acceptable.
 - 4. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
 - 5. Using the test plug, verify that the device and its outlet box are securely mounted.
 - 6. Tests shall be diagnostic, indicating damaged conductors, high resistance at the circuit breaker, poor connections, inadequate fault current path, defective devices, or similar problems. Correct circuit conditions, remove malfunctioning units and replace with new ones, and retest as specified above.
- C. Wiring device will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

END OF SECTION 26 27 26

PANEL NAME	AREA IN BUILDING	ROOM	MOUNTING	EXG NUM OF SPACES	REPLACEMENT SPACES	VOLTAGE / PHASE	PANEL RATING (A)	PANEL LUG RATING	MAIN CIRCUIT REQUIRED (RATING)	PANEL A/C	1P15	1P20	1P25 GFCI	1P30	1P50	2P15	2P20	2P30	2P50	2P60	2P100	3P15	3P20	3P30	3P40	3P50	3P60	3P70	3P80	3P90	3P100	3P150	3P175	3P200	3P225	3P250	3P280	3P400	3P500	NOTES		
OL	Basement	Custodial Storage 019	Surface	24	24	120/208/3P	100A	100A	-	10K		22																														
EX	Basement	Custodial Storage 019	Surface	12	12	120/208/3P	100A	100A	-	10K	7	2										1																				
GB1	Basement	Teacher's Work Rm030	Surface	42	42	120/208/3P	225A	225A	-	10K	1	25										3																				
KP SECTION 1	Basement	Kitchen 007	Recessed	36	42	120/208/3P	400A	400A	-	10K	3	5										2	1	2																		
KP SECTION 2	Basement	Kitchen 007	Recessed	42	42	120/208/3P	400A	400A	-	10K	9	18										1	1	2																		
SH1 SECTION 1	Basement	Tech Room 024	Surface	7	7	120/208/3P	225A	-	225A	10K		6																														
SH1 SECTION 2	Basement	Tech Room 024	Surface	24	24	120/208/3P	225A	225A	-	10K												8																				
SH1 SECTION 3	Basement	Tech Room 024	Surface	42	42	120/208/3P	225A	225A	-	10K	9	9										3	1	1																		
SH2 SECTION 1	Basement	Serving	Recessed	7	7	120/208/3P	250A	-	250A	10K		6																														
SH2 SECTION 2	Basement	Serving	Recessed	12	42	120/208/3P	400A	400A	-	10K	2											2																				
SH2 SECTION 3	Basement	Serving	Recessed	42	42	120/208/3P	400A	400A	-	10K	1	17	8	4								3	1																			
SH3 SECTION 1	Basement	Cafeteria	Recessed	30	30	120/208/3P	225A	225A	-	10K	6																															
SH3 SECTION 2	Basement	Cafeteria	Recessed	9	9	120/208/3P	225A	225A	-	10K	8																															
GBB	Basement	Custodial Storage 019	Surface	15	15	120/208/3P	200A	200A	-	10K																																
MDP1	Basement	Meter Room 131	Floor	30	30	120/208/3P	100A	100A	60A	10K																																
MDP2	1st Floor	Storage 186	Floor	Switchboard	Switchboard	120/208/3P	800A	800A	800A	10K																																
AP	1st Floor	Gym Storage 117	Surface	36	36	120/208/3P	225A	225A	-	10K																																
1A1	1st Floor	Janitor Closet 129	Recessed	42	42	120/208/3P	225A	225A	-	10K		39																														
1A2	1st Floor	Corridor 131	Recessed	30	30	120/208/3P	225A	225A	-	10K		14																														
1A3	1st Floor	Outside 120 Janitor CL	Recessed	36	36	120/208/3P	225A	225A	-	10K		36																														
1A4	1st Floor	Gym Storage 116	Surface	18	18	120/208/3P	100A	100A	-	10K		17																														
1B1	1st Floor	Stairway across 186 Rm	Recessed	42	42	120/208/3P	400A	400A	-	10K		36																														
1B2	1st Floor	Corridor across 184 Rm	Recessed	42	42	120/208/3P	400A	400A	-	10K		39																														
1B3	1st Floor	Corridor outside 189 Rm	Recessed	42	54	120/208/3P	400A	400A	-	10K		36	2																													
1B4	1st Floor	Corridor outside 199 Rm	Recessed	42	54	120/208/3P	225A	225A	-	10K		45																														
SP	1st Floor	Corridor 131	Recessed	42	42	120/208/3P	400A	400A	-	10K		34																														
2A1 SECTION 1	2nd Floor	Corridor outside 218 Rm	Recessed	24	24	120/208/3P	225A	225A	-	10K		14	4																													
2A1 SECTION 2	2nd Floor	Corridor outside 218 Rm	Recessed	24	24	120/208/3P	225A	225A	-	10K		14																														
2A2	2nd Floor	Corridor across 201 Rm	Recessed	42	42	120/208/3P	225A	225A	-	10K	1	37																														
2B1	2nd Floor	Corridor outside 242 Rm	Recessed	36	36	120/208/3P	400A	400A	-	10K		33																														
2B2	2nd Floor	Corridor outside 268 Rm	Recessed	30	30	120/208/3P	400A	400A	-	10K		22																														
2B3 SECTION 1	2nd Floor	Corridor outside 253 Rm	Recessed	30	42	120/208/3P	200A	-	200A	10K		38	2																													
2B3 SECTION 2	2nd Floor	Corridor outside 253 Rm	Recessed	30	42	120/208/3P	200A	-	200A	10K		36																														
2B4	2nd Floor	Corridor outside 280 Rm	Recessed	42	42	120/208/3P	225A	225A	-	10K	31	2																														
LPSC1	2nd Floor	Chemistry 263	Surface	24	24	120/208/3P	60A	60A	-	10K		22																														
LPSC2	2nd Floor	Storage 247	Surface	18	24	120/208/3P	100A	100A	-	10K		23																														

PROVIDE 100A 3P BREAKERS

1 Panel Replacement Schedule
NTS

ITEM	SYMBOL	ITEM	LUMINAIRE SCHEDULE			MANUFACTURERS (OR EQUAL)*		NOTE
			LUMENS	WATTAGE	TYPE	NAME	MODEL OR SERIES	
1		2' X 2' RECESSED TROFFER	4500	42	LED	SIGNIFY	2FXP-45L-835-2-DS-UNV-DIM	
1EM		2' X 2' RECESSED TROFFER WITH INTEGRAL BATTERY BACKUP	4500	42	LED	SIGNIFY	2FXP-45L-835-2-DS-UNV-DIM-EMLED	
2		2.25' APERTURE WITH 12" BAFFLE ACOUSTIC SUSPENDED LINEAR	1655	4.6	LED	FINELITE	HP-2-B-P-D-4'-835-F-SC-FC-10%-C4-FE	
2EM		2.25' APERTURE WITH 12" BAFFLE ACOUSTIC SUSPENDED LINEAR AND INTEGRAL BATTERY BACKUP	1655	4.6	LED	FINELITE	HP-2-B-P-D-4'-835-F-SC-FC-10%-C4-FE-BSL310LP	
3		2.25' X 4' APERTURE REGRESSED 1" DIFFUSER SURFACE MOUNT LINEAR	1486	4.6	LED	FINELITE	HP-2-SM-D-4-B-835-RG-D-120-SC-FC-10%-C4-FE	
3EM		2.25' X 4' APERTURE 1" REGRESSED DIFFUSER SURFACE MOUNT LINEAR WITH INTEGRAL BATTERY BACKUP	1486	4.6	LED	FINELITE	HP-2-SM-D-4-B-835-RG-D-120-SC-FC-10%-C4-FE-BSL310LP	
3A		2.25' X 4' APERTURE SURFACE 1" DIFFUSER RECESSED LINEAR	1486	4.6	LED	FINELITE	HP-2-SM-D-2-B-835-RG-D-120-SC-FC-10%-C4-FE	REFER TO PLANS FOR LENGTH AND CORNERS
4		2.25' X 4' APERTURE WITH SUSPENDED LINEAR	1486	4.6	LED	FINELITE	HP-2-B-P-D-4'-835-F-SCFC-10%-C4-FE	
4EM		2.25' X 4' APERTURE WITH SUSPENDED LINEAR WITH INTEGRAL BATTERY BACKUP	1486	4.6	LED	FINELITE	HP-2-B-P-D-4'-835-F-SCFC-10%-C4-FE-BSL310LP	
5		3.5" DIAMETER 12" CYLINDER PENDANT	950	18	LED	INTENSE LIGHTING	MXPRD-TW2-2-D10V1-WF-FR	
6		4" DIAMETER RECESSED DOWNLIGHT	1000	20	LED	INTENSE LIGHTING	4-R-N-Z4RDL-10-835-W-O-CD-Z10-U	
7		30" X 1.14" DISPLAY TASK LINEAR LIGHT	418lm/ft	4.1	LED	VODE LIGHTING	707-Z1-SL	REFER TO PLANS FOR LENGTH
8		2.25' X 4' RECESSED LINEAR	1692	4.6	LED	FINELITE	HP-2-R-D-4'-B-835-F-SC-FC-10%-C4-FE	
8EM		2.25' X 4' RECESSED LINEAR WITH INTEGRAL BATTERY BACKUP	1692	4.6	LED	FINELITE	HP-2-R-D-4'-B-835-F-SC-FC-10%-C4-FE-BSL310LP	
9		4" DIAMETER RECESSED SHOWER DOWNLIGHT	1000	11	LED	SIGNIFY (LIGHTOLIER)	4-R-N-Z4RDL-10-835-W-O-CD-Z10-U	
9EM		4" DIAMETER RECESSED SHOWER DOWNLIGHT WITH INTEGRAL BATTERY BACKUP	1000	11	LED	SIGNIFY (LIGHTOLIER)	4-R-N-Z4RDL-10-835-W-O-CD-Z10-U-EM	
10		48" X 46" X 36" CABLE MOUNTED ALUMINIUM/GLASS CHANDELIER		750	LED	NEMO LIGHTING	CRO HOW 52	
20		EXIT SIGN (SINGLE FACE)		2.5	LED	SIGNIFY (CHLORIDE)	ER48L-1-W-R	SEE PLANS FOR DIRECTIONAL INDICATORS
21		EXIT SIGN (DOUBLE FACE)		2.5	LED	SIGNIFY (CHLORIDE)	ER48L-2-W-R	SEE PLANS FOR DIRECTIONAL INDICATORS
30		BATTERY PACK EMERGENCY LIGHT		.027	LED	SIGNIFY	CLUN-W	

* MANUFACTURER AND MODEL NUMBER ARE PROVIDED TO SHOW BASIS OF DESIGN ONLY.
***ALL LUMINAIRES ARE 120V

General Notes

A. REFER TO DRAWING AE050 FOR GENERAL AND DEMOLITION NOTES.

S.E.D. Control No. 48-01-01-06-0-004-020

5	3/3/21	BID Addendum No 6
1	02/11/2021	BID Addendum No 1

Rev. No.: Date: Description:



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Tetra Tech Engineers, Architects & Landscape Architects, P.C.



Mahopac Central School District
Mahopac, NY

Reconstruction To:
Mahopac High School